CLAIMS

1. A thermoplastic elastomer composition comprising the following components [A], [B], [C], and [D]:

[A] 5 to 60 mass% of an ethylene-α-olefin-based copolymer having a limiting viscosity of 3.5 dl/g or more measured in a decalin solvent at 135°C,

[B] 1 to 20 mass% of a polyolefin-based resin, and

[C] 30 to 94 mass% of a mineral oil-based softening agent, provided that the total of the components [A], [B], and [C] is 100 mass%, and for 100 parts by mass of the components [A], [B], and [C],

[D] 0.1 to 50 parts by mass of a hydrogenated diene-based polymer,

at least [A] the ethylene-α-olefin-based copolymer and [B] the polyolefin-based resin being dynamically treated with heat in the presence of a cross-linking agent.

2. A thermoplastic elastomer composition comprising the following components [X], [B1], [C2], and [D1]:

[X] 5 to 60 mass% of an oil-extended rubber comprising [A1] 20 to 80 mass% of an ethylene-α-olefin-based copolymer having a limiting viscosity of 3.5 dl/g or more measured in a decalin solvent at 135°C and [C1] 20 to 80 mass% of a mineral oil-based softening agent, provided that the total of [A1] and [C1] is 100 mass%,

[B1] 1 to 20 mass% of a polyolefin-based resin, and

[C2] 30 to 94 mass% of a mineral oil-based softening agent, provided that the total of [X], [B1], and [C2] is 100 mass%, and for 100 parts by mass of the components [X], [B1], and [C2],

[D1] 0.1 to 50 parts by mass of a hydrogenated diene-based polymer,

at least [A1] the ethylene-α-olefin-based copolymer and [B1] the polyolefin-based resin being dynamically treated with heat in the presence of a crosslinking agent.

3. The thermoplastic elastomer composition according to claim 1 or 2, wherein the hydrogenated diene-based polymer [D] is at least one polymer selected from the group consisting of hydrogenated products of polymers comprising a monomer unit of a conjugated diene compound and hydrogenated products of polymers comprising a monomer unit of a conjugated diene compound and a monomer unit of a vinyl aromatic compound.

4. The thermoplastic elastomer composition according to any one of claims 1 to 3, wherein the thermoplastic elastomer composition has a durometer E hardness according to JIS K6253 of 80 or less.

5. The thermoplastic elastomer composition according to any one of claims 1 to 4, wherein the amount of ethylene monomer unit constituting the ethylene-α-olefin-based copolymer of [A] and [A1] is 35 to 95 mol% of the total monomer units consisting of the ethylene monomer unit and a monomer unit of an α-olefin compound.

6. The thermoplastic elastomer composition according to any one of claims 1 to 5, wherein the mineral oil-based softening agent of [C], [C1], and [C2] is a paraffin-based mineral oil.

7. The thermoplastic elastomer composition according to any one of claims 1 to 6, wherein the crosslinking agent is an organic peroxide selected from the group consisting of 1,3-bis(t-butylperoxyisopropyl)benzene, 2,5-dimethyl-2,5-di(t-butylperoxy)hexyne-3, 2,5-dimethyl-2,5-di(t-butylperoxy)hexane, α,α-bis(t-butylperoxy)diisopropylbenzene, dicumyl peroxide, and di-t-butyl peroxide.

8. The thermoplastic elastomer composition according to any one of claims 1 to 7, wherein the ethylene-α-olefin-based copolymer in the thermoplastic elastomer composition has a cyclohexane insoluble content at 23°C of 60 mass% or more.

9. A molded article made from the thermoplastic elastomer composition according to any one of claims 1 to 8.

10. A sealing material with low hardness made from the thermoplastic elastomer composition according to any one of claims 1 to 8.

11. The sealing material according to claim 10, having a durometer A hardness according to JIS K6253 of 40 or less.

12. The sealing material according to claim 10 or 11, formed into the shape of an O-ring, a sheet, or a rod.

13. A container using the sealing material according to any one of claims 10 to 12 as a component.

14. A container formed from a composite body comprising a sealing part made from the sealing material according to any one of claims 10 to 12 and a main body, produced by injection molding.

15. The container according to claim 14, wherein the main body is made from a thermoplastic resin and/or a thermoplastic elastomer composition and can be recycled.

16. A toner case having the sealing material according to any one of claims 10

to 12 as a component.